

# Is monkeypox airborne?

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Debate about whether monkeypox is airborne has trended on social media since the early days of the global outbreak, echoing a similar controversy from the first two years of the COVID-19 pandemic.

It took the World Health Organization (WHO) until the fall of 2020 to acknowledge that SARS-CoV-2 could spread through respiratory droplets, and two years before the agency quietly updated its website to state that airborne transmission can occur.

Critics say WHO's reluctance to acknowledge the possibility of airborne transmission undercut support for important precautions like masking and ventilation.

And although public health officials are less cagey about the possibility of airborne transmission with monkeypox, misunderstandings about the difference between airborne and respiratory transmission have contributed to confusion.

## Is airborne transmission of monkeypox possible?

According to WHO, monkeypox is transmitted through close contact with an infected person or animal, or contaminated material like bedding.

That includes contact with the respiratory droplets that people spray when they talk, cough, or sneeze — although scientists are still studying how commonly the virus spreads this way.

Respiratory droplets don't hang in the air for long, so transmission this way

usually requires prolonged face-to-face contact, posing the greatest risk to those who live with or care for infected people.

Notably, in cases where people with monkeypox have travelled on airplanes, no known transmissions occurred to the people sitting around them.

WHO acknowledged the potential for respiratory transmission back in June, as well as for "short-range aerosol transmission."

However, it's unknown whether monkeypox can spread via aerosols. These smaller viral particles can linger in the air over longer periods. So far, no cases of long-range airborne transmission have been reported.

Preprint research from the United Kingdom suggests it may be possible for monkeypox to become aerosolized, particularly during certain activities like changing contaminated bedding.

According to the Public Health Agency of Canada (PHAC), evidence of airborne transmission of smallpox also raises a concern that monkeypox may spread in a similar way.

Even so, airborne transmission "does not appear to be the primary mode of transmission," PHAC says.

In Ontario, for example, commonly reported risk factors for monkeypox infection include intimate contact with new sexual partners or multiple partners.

## Could masks help prevent the spread of monkeypox?

PHAC is recommending health care settings adopt precautions against airborne,

droplet, and contact transmission until more information is available.

The federal government is also generally encouraging "good hand hygiene and respiratory etiquette," including wearing a mask or covering coughs, along with limiting sexual partners and practising safer sex.

Other public health authorities have emphasized avoiding close physical contact without much reference to spraying droplets or inhaling aerosols.

The US Centers for Disease Control and Prevention initially warned travelers to wear face masks to prevent the spread of monkeypox but later dropped the recommendation, noting it "caused confusion."

Now, the agency only suggests masks for those in close contact with infected people.

"For people out and about, or traveling, the individual risk of having any contact with somebody with monkeypox remains incredibly low," Hugh Adler of the Respiratory Infections Group at the Liverpool School of Tropical Medicine told *Reuters*.

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